

78711-M-1

INSTRUCTION MANUAL FOR
ADVANCED TILT TOP LIGHT TABLE
DESIGNED AND BUILT BY

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June 1966

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I. DESCRIPTION

This table provides an 11" by 18" illuminated area for use in viewing single rolls of 9-1/2" to 2-3/4" (70 mm) film inclusive, or dual rolls of either 5" or 70 mm film, concurrently. The table can be tilted to a 70° vertical or 45° horizontal angle, as desired by the operator.

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II. ASSEMBLY FOR USE

- A. Rotate film crank handles being sure they turn freely.
- B. Connect the Master Control Panel Cable (#2 Figure 3) to the Master Control Console (#1 Figure 3) and the Light Table (#1 Figure 1) by attaching the respective cable connectors to their respective plugs.

CAUTION:

NEVER HAVE THE POWER PLUG CONNECTED
TO THE LIGHT TABLE WITHOUT THE MASTER
CONTROL CONSOLE BEING CONNECTED!!!!

- C. Connect the 120-volt, 60-cycle power cord to the Light Table and power line.

WARNING:

THIS TABLE TO BE USED ONLY WITH 120 VAC,
60 CYCLE WITH A 3RD GROUND WIRE. (BE
SURE THE TABLE IS ALWAYS ELECTRICALLY
GROUNDED!!!!)

- D. The table is now ready to be turned on. Press the power switch.
- E. Allow the table to warm up for 5 minutes at high intensities.
- F. Dissassemble by reversing steps D through A.

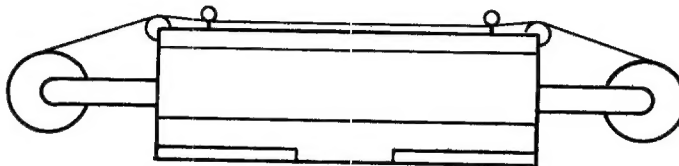
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III. ASSEMBLY OF FILM REELS

The Light Table is equipped to allow viewing of roll films ranging from 70 mm to 9.5 inches in width.

A. Loading of 70 mm Film

1. Turn the Bottom Film Transport handle counterclockwise (#8, right hand, Figure 2) until it hits the inner stop. Lock the brake (#9, Figure 2).
2. Turn the Top Film Transport handle clockwise (#8 left hand, Figure 2) until it hits the inner stop. Lock the brake (#9, Figure 2).
3. Position the Center Shade (#3, Figure 2) in the center of the viewing area.
4. Install the Center Film Arms (#13, Figure 2).
5. Now the film can be loaded by depressing the spring loaded reel holders in the Film Transports.



FILM THREADING SKETCH #1

B. Loading of 5" Film

1. Turn the Bottom Film Transport handle clockwise (#8 right hand, Figure 2) until it hits the outer stop. Lock the brake (#9, Figure 2).
2. Turn the Top Film Transport handle counterclockwise (#8 left hand, Figure 2) until the inner edge of the film arm lines up with the 5" film marker on the Light Table. Lock the brake (#9, Figure 2).
3. See III. A. 3.

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4. See III. A. 4.

5. See III. A. 5.

C. Loading of 9.5-Inch Film

1. See III. B. 1.
2. Turn the Top Film Transport handle counterclockwise (#8 left hand, Figure 2) until the inner edge of the film arm lines up with the 9.5" film marker on the Light Table. Lock the brake (#9, Figure 2).
3. Position the Center Shade (#3, Figure 2) to the extreme upper edge of viewing area.
4. Remove center film arms (#13, Figure 2) if installed.
5. See III. A. 5.

CAUTION

WHEN VIEWING 9.5" FILM THE DIRECTION
SWITCH (#5, Figure 3) MUST BE IN THE
→ (SAME) DIRECTION.

D. Loading Other Size Film

1. As previously mentioned this table permits viewing of films 70 mm to 9-1/2-inch widths. However, when film sizes other than the sizes mentioned above are viewed, the operator should be thoroughly familiar with the operation of the table and the damage that can be done if certain criteria are not followed.

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IV. MASTER CONTROL CONSOLE

The Master Control Console must be used with the table as all programming emanates from it. A brief description of the programming functions are as follows:

CAUTION:

NEVER HAVE THE POWER PLUG CONNECTED TO THE LIGHT TABLE WITHOUT THE MASTER CONTROL CONSOLE BEING CONNECTED ! ! ! !

1. The "Power" switch is used to turn ON & OFF (#3, Figure 3).
2. The "Bottom Group" switch controls the bottom film transporting system (#4, Figure 3).
3. The "Direction" switch controls and indicates the mode of film travel (#5, Figure 3).
4. The "Hold-Down Bars" switch controls the film bars (#6, Figure 3).
5. The "Top Group" switch controls the top film transporting system (#7, Figure 3).

The film transporting mechanism allows the following options on film transporting:

1. Two rolls of 70 mm or 5" film can be transported in the same direction.
2. Two rolls of 70 mm or 5" film can be transported in opposite directions.
3. Transporting the Top roll of film in either direction while the bottom roll of film does not move.
4. Transporting the bottom roll of film in either direction while the top roll of film does not move.

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Located immediately below the programming switches are another set of controls for applying brake action to the supply reels. The braking action increases when the knobs are rotated clockwise. The controls have been labeled to correspond with their respective controls when the Control Console is facing the operator and the operator is facing the viewing surface of the Light Table from the long axis. The Control labeled "DIM" is used to vary the intensity of the light source. A clockwise rotation increases the lamp intensity. WHEN FIRST TURNING ON THE TABLE ALLOW 5 MINUTES OF WARM UP TIME PRIOR TO OPERATION.

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V. FUSES

There are two electrical fuses protecting the Light Table.

1. The main power fuse is a 3 amp. , 125 V fuse and is located adjacent to the Power Connector on the back side of the table housing.
2. There is a 100 VDC, 1/2 AMP. , internal line fuse. It is located on the back of the Control Console adjacent to the Control Cable connector.

CAUTION:

THIS TABLE CONTAINS HIGH VOLTAGE AND
SHOULD BE SERVICED BY QUALIFIED PER-
SONNEL ONLY.

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VI. VIEWING SURFACE SHADES

The Light Table is equipped with shades. The function of the shades is to mask out the area of the light source not being used. When film is viewed which does not cover the entire viewing surface, the shades (#10, Figure 2) may be drawn by pulling up on the knobs (#2, Figure 2) and sliding the shades to the desired position.

When two rolls of film are viewed, the center strip between the two rolls of film may be shaded by using the center shade (#11, Figure 2). This can be done by unscrewing the knobs (#3, Figure 2) and sliding the shade to the desired position and securing the knobs.

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VII. TILT ANGLE ADJUST



The viewing surface of the Light Table can be tilted about its end from horizontal to a position of 15° measured from the vertical, by turning the hand crank (#3, Figure 1). After the table is positioned at the desired vertical viewing angle, lock the brake.

Also the Light Table can be tilted about its front edge from horizontal to a position of 45° by turning the hand crank (#5, Figure 2).

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VIII. FILM TRANSPORTING MECHANISM

The film drive mechanism is hand operated by means of either of two cranks (#4, Figure 2) on the front side, or by a single crank on the back of the Light Table.

Although the film drive mechanism is hand operated, the clutch-brake units operate only when power is applied to the desired unit. A clockwise rotation of one of the front hand wheels (#4, Figure 2) will transport film from left to right when operating with the "DIRECTION" switch in the  same mode. When the "DIRECTION" switch is changed  the direction of the top roll of the film changes as indicated by the direction markers on the switch. The whole film transporting can be reversed by reversing the direction of rotation of the hand crank to counterclockwise.

A two-speed mechanical gear shift (#12, Figure 2) is provided to switch the film transporting mechanism from low speed to high speed. When the gear shift knob (#12, Figure 2) is retracted, all the way out, the film transporting system is in high speed.

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IX. ILLUSTRATIONS

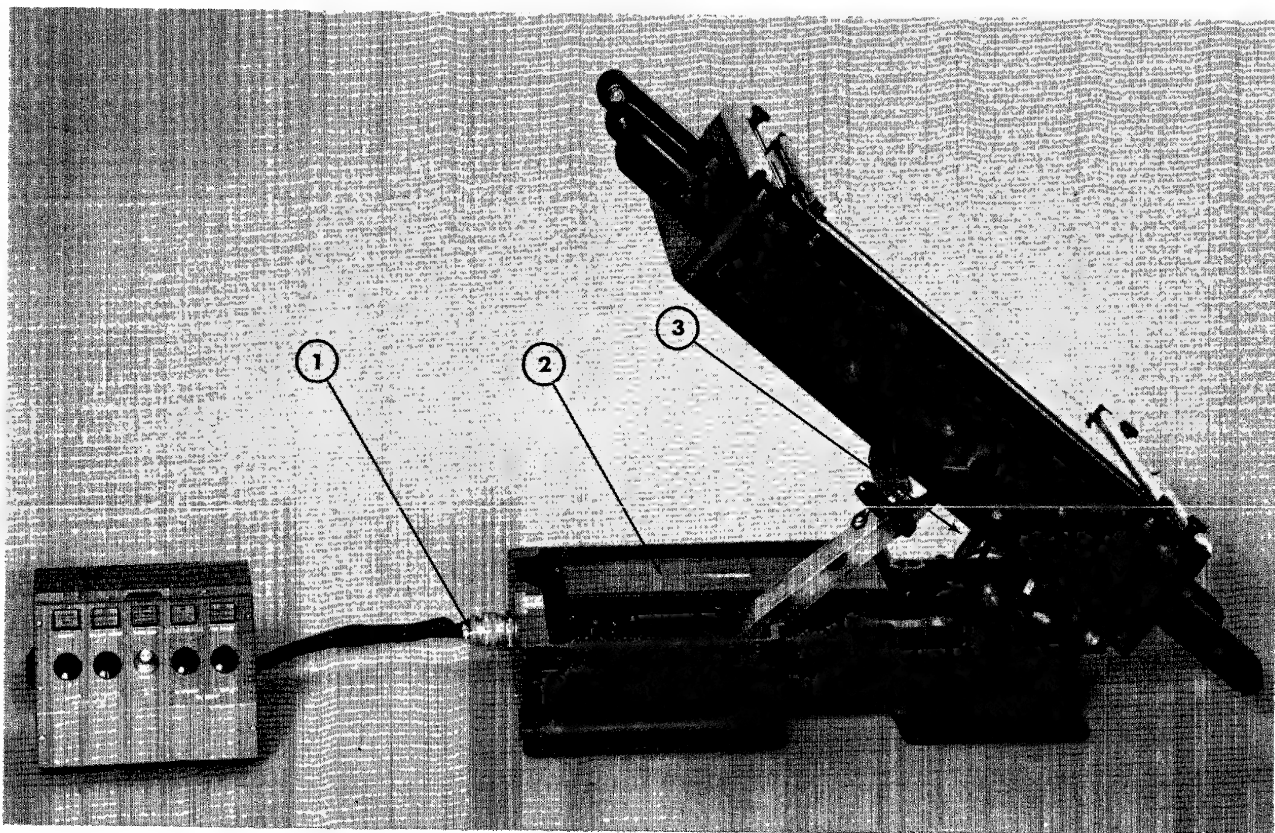


FIG. 1 ASSEMBLY

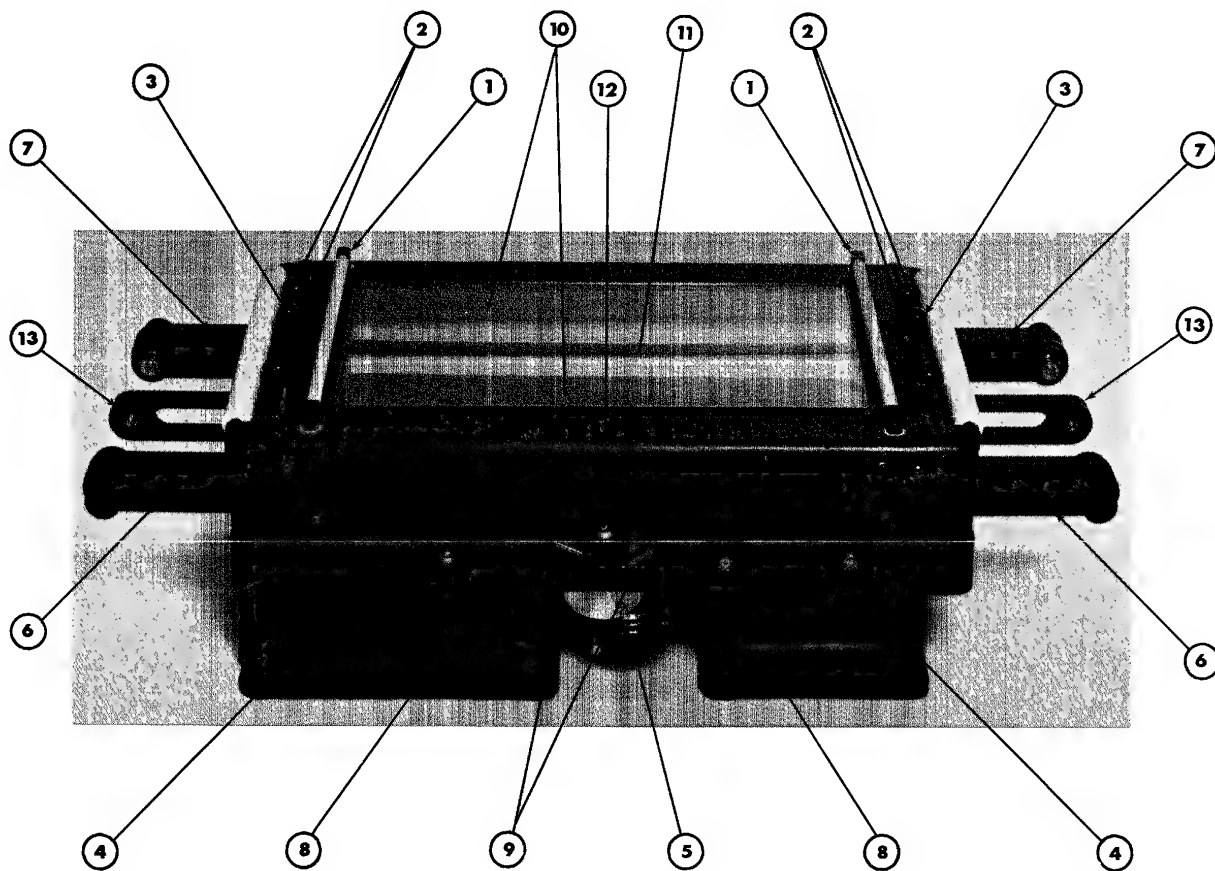


FIG. 2 TILT TABLE

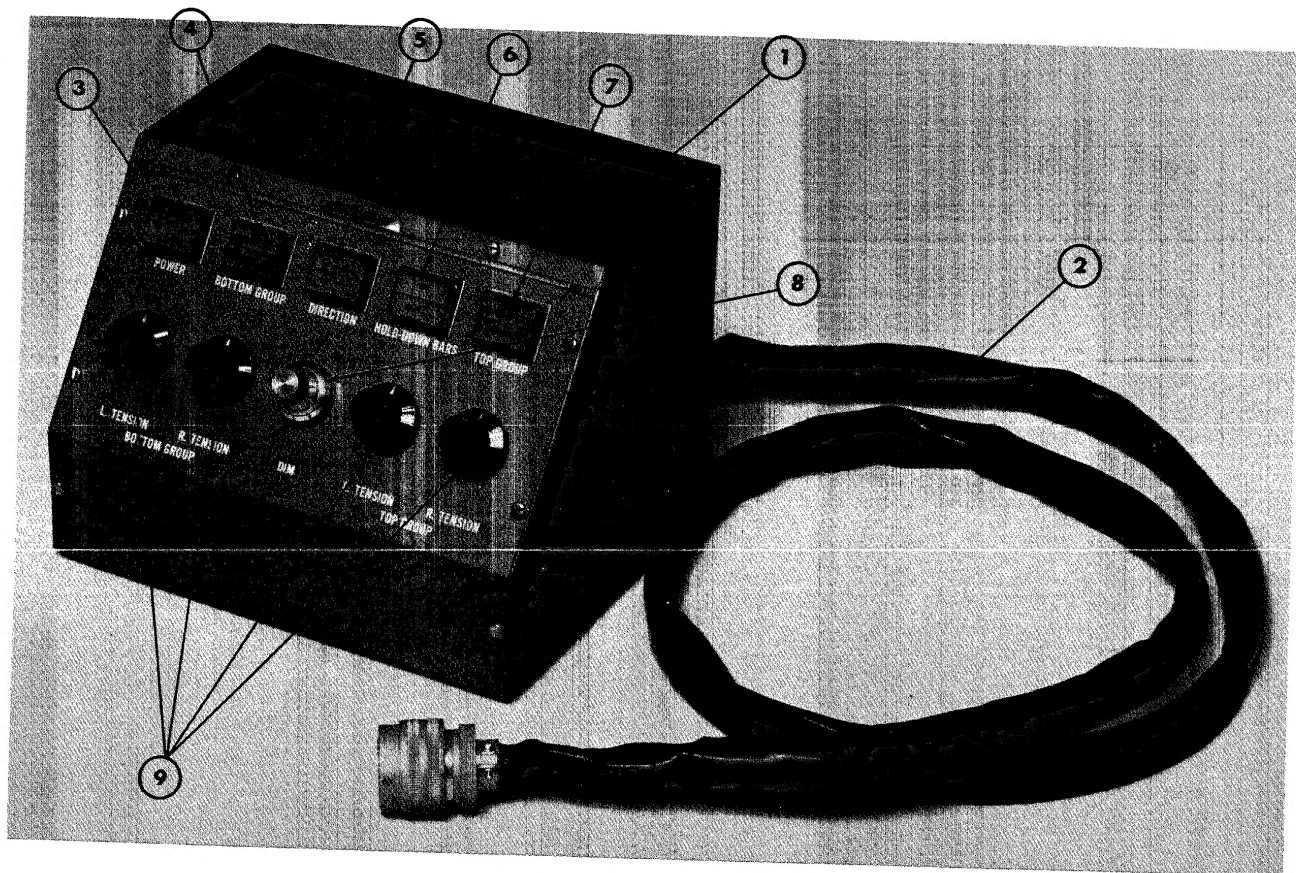


FIG. 3 CONTROL CONSOLE AND CABLE

X. SCHEMATIC

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